



# CAREERS IN AGRICULTURE

## Grade Level

7-12

## Length of Lesson

45 minutes

## Objective

By the end of this lesson, students will understand the variety of agricultural careers that may be available to them.

## Materials

- Career Cards and Definitions (1 per group)
- Scissors
- Student Worksheets (1 per student)

## Standards

### Common Core

SS.EC.FL.1.6-8.LC,  
SS.CV.3.3

### National AFNR

#### Standards

CRP.10.01, CS.05.01,  
CS.05.02, CRP.03.02,  
CRP.04.03, CS.06.02

## Lesson Summary

This lesson is designed to teach students about eight career focus areas in agriculture and the variety of careers that might be available to them.

## Suggested Sequence of Events:

1. Set Up: If you want to cut up the career cards and definitions ahead of time, you are welcome to do so. Otherwise, the procedures below outline the students doing it themselves.
2. Read through the [IAITC Careers Ag Mag](#) to learn more about agriculture careers. Interactive online versions can be found on our website.
3. Complete the activity following the procedures:
  - Split students into groups of 2-4.
  - Assign each group a career focus area.
  - Using the Careers Ag Mag and/or other local and online resources, have each group complete the Career Focus Area Group page.
  - Share out responses. While each group is sharing, have each individual student complete the Career Focus Areas page with their peers' definitions.
  - Pass out the Career Cards and Definitions pages to each group, along with pairs of scissors. Have them cut out the strips of paper and lay them out on the table in front of them.
  - Ask students to try to match the career cards to the correct definitions. Answer key is attached.
  - Check students' work and go over the answers as a class.
  - Once all careers are correctly matched with their definitions, have the students then try to match the careers to the correct focus area. There will be four careers per career focus area.
  - Extension: Allow students to identify careers from this activity that they might be interested in and do more research on them.
4. Whole class discussion and reflection of activity.

# TEACHER RESOURCES

## Extension Ideas

- These careers and descriptions were retrieved from [agexplorer.ffa.org](http://agexplorer.ffa.org). Have students complete the CareerFinder Quiz on this same website to be matched with careers.
- Have students choose a career and create:
  - A social media profile for the career
  - A poster for a walk-the-walls poster session about the career
  - A plan for which classes to take in high school and what to study in college to eventually have a career in this field.
- Have students write their own descriptions for Ag careers.
- Go to [agintheclassroom.org](http://agintheclassroom.org) to contact your County Ag Literacy Coordinator for free classroom sets of our Ag Mags!

# CAREERS IN AGRICULTURE

**ANIMAL  
SCIENCE**

**PLANT  
SCIENCE**

**AG EDUCATION &  
COMMUNICATION**

**AGRICULTURAL  
BUSINESS**

**FOOD  
SCIENCE**

**AGRICULTURAL  
MECHANICS**

**NATURAL  
RESOURCES**

**ENVIRONMENTAL  
SERVICES**

# CAREERS IN AGRICULTURE

## CAREER FOCUS AREA GROUP PAGE

Complete this page with your group.

### OUR CAREER FOCUS AREA:

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### OUR DEFINITION:

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### CAREERS WE THINK MIGHT BE IN THIS AREA:

# CAREERS IN AGRICULTURE

## CAREER FOCUS AREAS

Define each career focus area in the table below.

<b>AGRICULTURAL BUSINESS</b>	
<b>AG EDUCATION &amp; COMMUNICATION</b>	
<b>AGRICULTURAL MECHANICS</b>	
<b>ANIMAL SCIENCE</b>	
<b>ENVIRONMENTAL SERVICES</b>	
<b>FOOD SCIENCE</b>	
<b>NATURAL RESOURCES</b>	
<b>PLANT SCIENCE</b>	

# CAREERS IN AGRICULTURE

## CAREER & DEFINITION CARDS

Cut out these career cards and definitions and then try to match the career to its correct definition. These are not in the correct order!

<b>ACCOUNTANT</b>	Teach middle & high school students in a classroom about agriculture, food, and natural resources.
<b>AGRICULTURAL LOAN OFFICER</b>	Help producers and agricultural business owners obtain funds needed to fund their operation.
<b>AGRICULTURE LAWYER</b>	Ensure the food is processed, packaged, and prepared safely as directed by the company and regulatory organizations.
<b>MARKET ANALYST</b>	Advise human clients on their food selection based on their lifestyles, tastes, and health needs. Research and stay up to date on nutritional science.
<b>AGRICULTURAL SCIENCE TEACHER</b>	Design and create arrangements of flowers for personal enjoyment or special occasions.
<b>EXTENSION YOUTH PROGRAM COORDINATOR</b>	Tests water and air sources for pollution caused by human activities and designs and implements plans to control and prevent further pollution,
<b>AGRICULTURE JOURNALIST</b>	Help producers and agricultural business owners obtain funds needed to fund their operation.
<b>AGRICULTURE BROADCASTER</b>	Research and provide advice on feed product selection, maintenance feeding programs, and modifications of diets to meet desired outcomes.

# CAREERS IN AGRICULTURE

## CAREER & DEFINITION CARDS

Cut out these career cards and definitions and then try to match the career to its correct definition. These are not in the correct order!

<b>ANIMAL GENETICIST</b>	Own and operate a food service business, either locally owned or franchised. Manage all aspects of food buying, preparing, and selling.
<b>ANIMAL PHYSICAL THERAPIST</b>	Use radio and/or television outlets to report on stories relevant to agriculture for both producers and consumers.
<b>VETERINARIAN</b>	Prepare and examine financial records for agriculture companies and make recommendations on spending and saving.
<b>ANIMAL NUTRITIONIST</b>	Analyze research and data about our planet's climate and make recommendations for changes in environmental practices.
<b>AGRONOMIST</b>	Analyze agriculture markets and help companies by suggesting new products, markets, or services.
<b>FLORIST</b>	Study and oversee the protection and management of wild plants and animals. Ensure accurate data is available about wildlife populations.
<b>PLANT GENETICIST</b>	Responsible for the management of goods, materials, services, and/or equipment along the food supply chain.
<b>LANDSCAPE DESIGNER</b>	State and tribal law enforcement officers who work with conservationists to secure and preserve natural resources through a wide range of laws.

# CAREERS IN AGRICULTURE

## CAREER & DEFINITION CARDS

Cut out these career cards and definitions and then try to match the career to its correct definition. These are not in the correct order!

<b>AGRICULTURAL ENGINEER</b>	Travels to businesses, schools, and community groups to teach about recycling.
<b>CARPENTER</b>	Helps improve animal mobility by rehabilitating animals that have had surgery, amputations, been injured, or suffer from pain or health issues.
<b>MECHANIC</b>	Responsible for maintaining the health of animals as well as the diagnosis and treatment of sickness, disease, and injury.
<b>WELDER</b>	Work in a county extension office overseeing county 4-H clubs and youth development programs.
<b>SUSTAINABILITY SPECIALIST</b>	Help companies and organizations in the execution of sustainability strategies and plans to conserve natural resources.
<b>WILDLIFE BIOLOGIST</b>	Work with all variables involved in the production of row crops such as soil and land management, nutrient needs, water needs, pest control, etc.
<b>CONSERVATION OFFICER</b>	Report and write stories for web and print sources about agriculture topics for both producers and consumers to read.
<b>FORESTER</b>	Analyze the genetic makeup of animals to discover genes that lead to animal behaviors. Research leads to breeding selection decisions to better the species.



# CAREERS IN AGRICULTURE

## CAREER & DEFINITION CARDS

Cut out these career cards and definitions and then try to match the career to its correct definition. These are not in the correct order!

<b>FOOD SAFETY SPECIALIST</b>	Weld steel framework for buildings, machines, and other equipment using manual or semi-automatic welding equipment.
<b>NUTRITIONIST / DIETICIAN</b>	Prepare blueprints, coordinate contracts with customers, propose plans, and implement the development of landscape design and maintenance.
<b>RESTAURANT OWNER</b>	Develop appropriate methods for removing and managing animal and food waste from or in the environment.
<b>FOOD SUPPLY CHAIN MANAGER</b>	Construct, install, and repair structures of wood, plywood, wallboard, and other wood-based materials used in buildings.
<b>CLIMATE CHANGE ANALYST</b>	Apply engineering science and design principles for the use and development of agricultural land, buildings, machines, and equipment.
<b>WASTE MANAGEMENT SPECIALIST</b>	Care for, plant and manage trees or forests. Involved in a range of activities including restoration, conservation, and timber harvest.
<b>POLLUTION CONTROL MANAGER</b>	Maintain and repair different kinds of farm equipment such as combines and tractors.
<b>RECYCLING ADVOCATE</b>	Represent agriculture clients on a wide range of legal matters and help them obtain licenses and permits they might need.

# CAREERS IN AGRICULTURE

## CAREER FOCUS AREAS - ANSWER KEY

Answers may vary!

<b>AGRICULTURAL BUSINESS</b>	Combines the world of agriculture with the fundamentals of business, such as economics, marketing, management, marketing, finance, etc.
<b>AG EDUCATION &amp; COMMUNICATION</b>	Teaching and communicating about the agriculture industry to those in and outside of agriculture.
<b>AGRICULTURAL MECHANICS</b>	The operation, maintenance, service, selling, construction, and use of power units, machinery, equipment, and structures for agricultural use.
<b>ANIMAL SCIENCE</b>	The science of domesticating both livestock and companion animals and managing their nutrition, care, health, and well-being.
<b>ENVIRONMENTAL SERVICES</b>	Industry that produces goods, services, and research in efforts to prevent, limit, or correct environmental damage caused by humans (i.e. - pollution).
<b>FOOD SCIENCE</b>	The study of food, food processing, and improvement of food for the general public. Also includes sanitation and selling of food.
<b>NATURAL RESOURCES</b>	The study and management of natural resources such as land, water, soil, plants, and animals. Also deals with the study of renewable resources.
<b>PLANT SCIENCE</b>	The study of plants, including their growth, structure, properties, processes, classification, diseases, and environmental interactions.

# CAREERS IN AGRICULTURE

## CAREER & DEFINITION CARDS - ANSWER KEY

<b>ACCOUNTANT</b>	Prepare and examine financial records for agriculture companies and make recommendations on spending and saving.
<b>AGRICULTURAL LOAN OFFICER</b>	Help producers and agricultural business owners obtain funds needed to fund their operation.
<b>AGRICULTURE LAWYER</b>	Represent agriculture clients on a wide range of legal matters and help them obtain licenses and permits they might need.
<b>MARKET ANALYST</b>	Analyze agriculture markets and help companies by suggesting new products, markets, or services.
<b>AGRICULTURAL SCIENCE TEACHER</b>	Teach middle & high school students in a classroom about agriculture, food, and natural resources.
<b>EXTENSION YOUTH PROGRAM COORDINATOR</b>	Work in a county extension office overseeing county 4-H clubs and youth development programs.
<b>AGRICULTURE JOURNALIST</b>	Report and write stories for web and print sources about agriculture topics for both producers and consumers to read.
<b>AGRICULTURE BROADCASTER</b>	Use radio and/or television outlets to report on stories relevant to agriculture for both producers and consumers.

Agricultural Business

Ag Education & Communication

# CAREERS IN AGRICULTURE

## CAREER & DEFINITION CARDS - ANSWER KEY

Animal Science	<b>ANIMAL GENETICIST</b>	Analyze the genetic makeup of animals to discover genes that lead to animal behaviors. Research leads to breeding selection decisions to better the species.
	<b>ANIMAL PHYSICAL THERAPIST</b>	Helps improve animal mobility by rehabilitating animals that have had surgery, amputations, been injured, or suffer from pain or health issues.
	<b>VETERINARIAN</b>	Responsible for maintaining the health of animals as well as the diagnosis and treatment of sickness, disease, and injury.
	<b>ANIMAL NUTRITIONIST</b>	Research and provide advice on feed product selection, maintenance feeding programs, and modifications of diets to meet desired outcomes.
	<b>AGRONOMIST</b>	Work with all variables involved in the production of row crops such as soil and land management, nutrient needs, water needs, pest control, etc.
Plant Science	<b>FLORIST</b>	Design and create arrangements of flowers for personal enjoyment or special occasions.
	<b>PLANT GENETICIST</b>	Conduct research to understand or create new varieties of plants or crops in order to improve shape, size, production level, or pest tolerance.
	<b>LANDSCAPE DESIGNER</b>	Prepare blueprints, coordinate contracts with customers, propose plans, and implement the development of landscape design and maintenance.

# CAREERS IN AGRICULTURE

## CAREER & DEFINITION CARDS - ANSWER KEY

Agricultural Mechanics

Natural Resources

<b>AGRICULTURAL ENGINEER</b>	Apply engineering science and design principles for the use and development of agricultural land, buildings, machines, and equipment.
<b>CARPENTER</b>	Construct, install, and repair structures of wood, plywood, wallboard, and other wood-based materials used in buildings.
<b>MECHANIC</b>	Maintain and repair different kinds of farm equipment such as combines and tractors.
<b>WELDER</b>	Weld steel framework for buildings, machines, and other equipment using manual or semi-automatic welding equipment.
<b>SUSTAINABILITY SPECIALIST</b>	Help companies and organizations in the execution of sustainability strategies and plans to conserve natural resources.
<b>WILDLIFE BIOLOGIST</b>	Study and oversee the protection and management of wild plants and animals. Ensure accurate data is available about wildlife populations.
<b>CONSERVATION OFFICER</b>	State and tribal law enforcement officers who work with conservationists to secure and preserve natural resources through a wide range of laws.
<b>FORESTER</b>	Care for, plant and manage trees or forests. Involved in a range of activities including restoration, conservation, and timber harvest.

# CAREERS IN AGRICULTURE

## CAREER & DEFINITION CARDS - ANSWER KEY

Food Science	<b>FOOD SAFETY SPECIALIST</b>	Ensure the food is processed, packaged, and prepared safely as directed by the company and regulatory organizations.
	<b>NUTRITIONIST / DIETICIAN</b>	Advise human clients on their food selection based on their lifestyles, tastes, and health needs. Research and stay up to date on nutritional science.
	<b>RESTAURANT OWNER</b>	Own and operate a food service business, either locally owned or franchised. Manage all aspects of food buying, preparing, and selling.
	<b>SUPPLY CHAIN MANAGER</b>	Responsible for the management of goods, materials, services, and/or equipment along the food supply chain.
Environmental Systems	<b>CLIMATE CHANGE ANALYST</b>	Analyze research and data about our planet's climate and make recommendations for changes in environmental practices.
	<b>WASTE MANAGEMENT SPECIALIST</b>	Develop appropriate methods for removing and managing animal and food waste from or in the environment.
	<b>POLLUTION CONTROL MANAGER</b>	Tests water and air sources for pollution caused by human activities and designs and implements plans to control and prevent further pollution.
	<b>RECYCLING ADVOCATE</b>	Travels to businesses, schools, and community groups to teach about recycling.